

MULTI MILL

The multi mill is a versatile equipment widely used in various industries for several processes, including particle size reduction, milling, mixing, and granulation. Here's a detailed overview of the utilization of multi mills and the associated processes:

Particle Size Reduction:

Multi mills are commonly used for reducing the particle size of solid materials. The material is fed into the multi mill through a hopper, and it passes through a series of rotating blades or beaters. The rotating blades create impact, cutting, and shearing forces, which effectively reduce the size of the particles. This process helps achieve a uniform particle size distribution and improves the flow properties of powders.

Milling:

Multi mills are utilized for milling applications where the goal is to achieve fine particles or a specific particle size range. The material is introduced into the mill, and the rotating blades or beaters within the mill break down the material through cutting, impact, and shearing actions. Milling is commonly performed on materials such as pharmaceutical ingredients, chemicals, food products, and cosmetic powders.

Mixing and Blending:

Multi mills are effective for mixing and blending different materials to achieve homogeneity. The material to be mixed is fed into the mill, and the rotating blades create a tumbling and shearing action, ensuring thorough blending and distribution of the components. This process is used in industries such as pharmaceuticals, food, and chemicals to produce blends, granules, and solid dosage forms.

It is important to note that the specific utilization and process of a multi mill may vary based on the industry, application, and the nature of the materials being processed. The versatility of multi mills makes them suitable for a wide range of particle size reduction, milling, mixing, and granulation applications across various industries.



Granulation:

Multi mills find application in the granulation process, which involves the formation of granules from powders or the enlargement of existing granules. The multi mill can be used to break down larger granules into smaller particles or to blend and mix the powders before the granulation process. Granulation is important for achieving uniform granule size, improving flow properties, and facilitating compression or further processing of the granules.

Size Separation:

Multi mills can be equipped with different mesh screens or perforated plates to achieve size separation of particles. The screens allow particles of a specific size to pass through while retaining larger particles. This process helps obtain the desired particle size distribution and separate particles for further processing or quality control purposes.

Wet Milling:

Multi mills can also be used for wet milling applications where a liquid is added to the material being processed. The wet milling process helps in reducing particle size, enhancing dissolution rates, and improving the bioavailability of pharmaceutical compounds.

Technical Specifications Table:-

MODEL	OUTPUT KGS/HR.	ROTOR SPEED	MOTOR HP
MML- 1HP	0-100 Kgs/Hr.	0-2800 RPM	1 HP
MML- 3HP	0-250 Kgs/Hr.	0-2800 RPM	3 HP
MML- 5HP	0-500 Kgs/Hr.	0-2800 RPM	5 HP
MML- 7.5HP	0-750 Kgs/Hr.	0-2800 RPM	7.5 HP